

Solar Decathlon

Energy We Can Live With

Request for Proposals

Issue Date: February 1, 2003

Due Date: April 30, 2003
4:00 p.m. Mountain time

INTRODUCTION

The U.S. Department of Energy (DOE) and the National Renewable Energy Laboratory (NREL) invite your submission to participate in the 2005 Solar Decathlon in accordance with the requirements and conditions set forth herein.

The Solar Decathlon is an intercollegiate design competition among student teams that will design, build, and operate solar-powered houses. This competition is open exclusively to colleges, universities and other post-secondary educational institutions.

The 21st century will present us with challenges that demand more sophisticated energy technologies. These new technologies must be cost effective and environmentally sound. With this in mind, DOE and its partners offer this challenging competition. The challenge is to design and build a (nominal) 500-square-foot, solar powered house. The energy source for the house will be limited to only the renewable energy incident upon the specified space that the house will occupy during the competition. No other pre-stored form of energy or fuel is allowed. The competition will take place in Washington, D.C., in 2005, for approximately one week (preceded by one week of assembly and followed by one week of disassembly). The winner of the Solar Decathlon will be the team that can score the most points from ten contests that test the effectiveness of their design.

Clean, plentiful sources of energy that power healthy places in which to live and work are keys to improving quality of life. By participating in the Solar Decathlon you will be showing the nation, and the world, how to build a better future by harnessing clean "energy we can live with."

The Solar Decathlon Events

The Solar Decathlon winner will score the most points from all ten contests. The ten contests are based on three guiding principles for the competition:

- 1) Supplying the energy requirements necessary to live and work using only the renewable energy incident on the building during the competition,
- 2) Exemplifying design principles that will increase public awareness of the aesthetic and energy benefits of solar energy, resulting in increased utilization of these design principles and technologies, and
- 3) Stimulating the acceleration of research and development (R&D) of renewable energy, particularly in the area of buildings applications.

The following set of priorities has been used to determine what the ten contests should encompass.

Energy Production—The house must be able to supply all the energy needed for its occupants to survive and prosper in today's society. Supply of domestic energy and the energy required for a home-based business will be tested. The competition will quantify energy production and productive output.

Energy Efficiency—Efficiency reduces consumption and enables more work to be accomplished with a given amount of energy. Because the amount of sunlight that strikes the surface of a house is limited, end-use efficiency will be a key strategy to success.

Design—Design is important to improve effectiveness, efficiency, function, and comfort. Design also plays a key role in purchase decisions. The house must be visually attractive and compelling to entice positive purchase decisions, especially when new technology is being introduced. As a critical part of the competition, emphasis will be placed on dwelling livability, aesthetics of structure and system components, as well as the integration of dwelling with energy systems.

Heating and Air Conditioning—Everyone needs a comfortable space in which to live protected from winter snow, wind and rain, and summer heat. For good health, the conditioned space must minimize indoor pollutants.

Refrigeration—Food preservation is considered a necessity.

Water—Hot, running water is considered a necessity.

Lighting—Lights improve functionality, safety, education, and quality of life.

Communication—Print and electronic and video communication save time and improve our safety and quality of life by providing the important information we use to make critical decisions.

Transportation—Mechanized transportation saves time and improves productivity.

Appliances—Appliances save time and physical work and improve quality of life.

All structures must be modular and assembled within a several-day period before the contest begins. No basements are allowed, and the house must not disturb the ground on which it sits. The 2002 Solar Decathlon Rules and Regulations document is available at <http://www.solardecathlon.org>. The 2002 document is the basis for the 2005 competition, though it will be revised prior to the 2005 event.

EVALUATION AND SELECTION PROCESS

Entries for the 2005 Solar Decathlon will be selected through a proposal process. All proposals received will be reviewed, scored and ranked. Subject to the quantity and quality of the submissions, up to eighteen (18) teams may be selected for entry and awarded amounts of \$5,000 each. The teams selected for entry and an award will be announced approximately June 15, 2003.

To participate in the Solar Decathlon, you must submit a proposal in accordance with this Request for Proposals **and** be selected to participate.

All qualified school teams intending to submit a proposal must register by April 1, 2003. Registration is free. Please use Attachment A: Solar Decathlon Registration Form to register. Please send completed forms to:

National Renewable Energy Laboratory (NREL)
Attention: *Solar Decathlon*
1617 Cole Boulevard
Golden, CO 80401
Fax: 303-384-7540
E-mail: solar_decathlon@nrel.gov

The evaluation criteria are outlined in Attachment B. These criteria will be used in evaluating your proposal. NREL reserves the right to use technical assistance of qualified personnel within private industry, the Government, the national laboratories, and private consultants to NREL for the technical evaluation. By submission of its proposal, the school hereby consents to the disclosure of proposal contents to such personnel for the purpose of evaluation.

AWARD TYPE

Once selected for entry and award, firm-fixed price subcontracts will be placed with each team/organization. For your review, a sample subcontract (do not complete or include with your proposal) will be provided as Attachment E. You may download the

terms and conditions (Appendix B-2 and Appendix C-2) and the Representations and Certifications form from the following website:

www.nrel.gov/contracts/related_docs.html

INSTRUCTIONS

A complete entry application includes

- 1) One completed Registration Form (Attachment A) – due April 1, 2003**
- 2) Eight (8) copies of a signed proposal (see Attachments B & C) – due April 30, 2003**
- 3) One signed Participation Agreement (Attachment D) – included in proposal due April 30, 2003.**
- 4) One completed and signed original of the Representations Certifications form-due April 30, 2003**
(Download form from: www.nrel.gov/contracts/related_docs.html)

The proposal, Representations and Certifications form, and the Participation Agreement are to be signed by an authorized official of the educational institution. If two or more institutions submit one proposal, an authorized official from each institution shall sign the proposal, complete and sign the Representations and Certifications form, and the Participation Agreement. Faxed Proposals and proposals sent by e-mail will NOT be accepted.

The proposal, Representations and Certifications form, and completed entry application should be sent to:

National Renewable Energy Laboratory (NREL)
Attention: *Judy Foster, MS 2713*
1617 Cole Boulevard
Golden, CO 80401-3393 USA
Phone: 303/384-7387
Fax: 303/384-7397

To facilitate handling, please mark on the outside of the envelope containing your proposal or other related information:

Solar Decathlon Proposal
TO BE OPENED BY ADDRESSEE ONLY

LATE PROPOSALS, MODIFICATIONS, AND WITHDRAWAL OF PROPOSALS

Proposals or modifications to proposals received after the date specified for receipt may be considered for entry or award. However, late proposals or modifications received after the date specified might indicate to those reviewing the proposals for entry or award that the team submitting the late materials is not sufficiently prepared to

participate in the Solar Decathlon. **Faxed proposals and proposals sent by e-mail will NOT be accepted.** Proposals may be withdrawn by written notice, fax, or email received at any time before award. Proposals may be withdrawn in person by an authorized representative, if the representative's identity is made known and the representative signs a receipt for the proposal.

QUESTIONS AND INQUIRIES

Please read the Request for Proposals carefully. All questions and inquiries regarding the Request for Proposals must be submitted in writing to *Solar Decathlon* at the address shown above. Questions will be accepted by mail, fax [303-384-3800] or e-mail [solar_decathlon@nrel.gov] only. Please, no telephone requests. Replies to questions (if considered appropriate and material) will be posted on the web site <http://www.solardecathlon.org> as soon as possible.

BUILDING DESIGN AND PERFORMANCE MODEL REPORT

It is the organizers intent to hold a safe, environmentally sensitive, technically sound competition that meets the goals stated herein. Therefore, each team selected for participation will also be required to submit, in approximately October 2004, a report describing the detailed building design, the structural and safety considerations, and a building performance model (using a software package as specified by the organizers) that predicts the annual performance of the building in Washington, D.C. This is a qualifying step, and approval of this report is required for participants in the event. Teams will have until approximately December 2004, to achieve an approval rating for this report. The organizers will provide feedback to teams identifying deficiencies and requirements for final approval.

**ATTACHMENT A
REGISTRATION FORM FOR ENTRY**

Solar Decathlon

(Please print)

DATE _____

SCHOOL NAME

SCHOOL ADDRESS

CITY, STATE, ZIPCODE

PHONE NUMBER

KEY FACULTY CONTACT

CONTACT ADDRESS

CITY, STATE, ZIPCODE

PHONE NUMBER

KEY STUDENT CONTACT

CONTACT ADDRESS

CITY, STATE, ZIPCODE

PHONE NUMBER

FAX NUMBER

E-MAIL ADDRESS

COMPLETE THIS FORM AND SUBMIT BY APRIL 1, 2003

ATTACHMENT B

Proposal Preparation and Evaluation Criteria

The proposal will be limited to 25 pages, including any diagrams, charts, or appendices. A format guide (Attachment C) has been included to help you with this process. Your proposal must be received **no later than 4:00 P.M. Mountain time, April 30, 2003**.

All proposals will be judged on a competitive basis, in two stages. First, proposals will be screened to ensure that they meet the stated requirements (i.e., received on time, from a qualified educational institution, contain all required documentation, etc.). Proposals found to meet those requirements will be evaluated to determine which teams have the most promising approach to and potential for building a successful Solar Decathlon entry.

The proposals will be scored based on the following criteria:

- 40% **Technical Innovation and Design**—The conceptual design of the Solar Decathlon entry addresses aesthetics, feasibility of the design, scientific/technical quality, soundness of the analyses, trade-offs, and design approach. The selected components and materials are adequate. Environmental, safety, and health considerations are addressed for the construction and competition phases of the Solar Decathlon, including assembly and disassembly in Washington D.C. Multidisciplinary teaming (e.g., between design, communications, and engineering disciplines) is strongly encouraged.
- 30% **Organization and Project Planning**—The proposal gives a clear understanding of all the activities involved in the project. The activities are planned and organized adequately to ensure successful completion. The organization chart and timeline exhibit good planning. How and who will make decisions and how conflicts will be resolved are adequately addressed. How the house will be transported to the competition, assembled and disassembled are addressed.
- 15% **Curriculum Integration and Special Considerations**—The institution(s) plans to maximize the educational benefits of the project. The Solar Decathlon project is integrated in to the students' course work. The Solar Decathlon project incorporates special considerations that deserve extra merit, such as technical innovation and creativity, or new ideas that will make the project more likely to succeed.
- 15% **Fund Raising and Team Support**—The proposal gives a clear understanding of the costs associated with the project and the need for fund raising. Fund raising has been adequately planned. The level of available or obtainable equipment, instrumentation, and facilities is adequate.

These evaluation criteria are listed in order of importance. Technical reviewers will base their conclusions only on information contained in the proposals. It cannot be assumed that reviewers are acquainted with the institutions or key individuals or any of their prior work or accomplishments.

ATTACHMENT C

Proposal Format Guide

The following are necessary elements of your proposal. Please note that the page limit, including appendices, is 25 pages:

COVER PAGE

The cover page shall include the signature of an authorized official of the institution.

TABLE OF CONTENTS

INTRODUCTION

The introduction or summary should be presented first and should briefly overview your entire proposal.

TECHNICAL INNOVATION AND DESIGN

This section should provide a clear technical discussion of design considerations and trade-offs for your building and associated energy systems, as well as the scientific/technical analyses of the proposed design, including selected components and materials. This section should also address safety aspects of the project, particularly during the construction, assembly and disassembly phases, and the environmental impacts of the project.

ORGANIZATION AND PROJECT PLANNING

This section should provide a clear discussion of all of the activities involved in the project, as well as their planned implementation and organization to ensure successful completion. Issues and opportunities associated with the multidisciplinary aspects of the project (e.g., in the case where different departments or institutions are involved) should be described.

CURRICULUM INTEGRATION AND SPECIAL CONSIDERATIONS

This section should describe how the school(s) plans to maximize the educational benefits of the project and how the solar decathlon project will be integrated in to the students' course work. This section should including any other considerations that may make your team especially suited for participation in this competition.

FUND RAISING AND TEAM SUPPORT

This section should provide a clear understanding of the costs associated with the project and the need for fund raising, how that fund raising is planned, and whether there are available or obtainable equipment, instrumentation, and facilities.

CONCLUSIONS

This section should justify, based on the presentations of the other sections, your team's selection for participation in the Solar Decathlon and the \$5,000 monetary award.

APPENDICES

As appropriate, include supplemental information such as budgets, resumes of team members, letters of support, and tables of supporting data.

Note: The entire proposal shall not exceed 25 pages, including all of the above elements.

General notes for proposal preparation:

Note that these are **recommendations**, provided with the intent to make the preparation process easier for the proposers and the review process easier for the proposal reviewers. The evaluation criteria are keyed to the Proposal Format Guide.

While the appearance of a proposal is important, the emphasis should be placed on the content and the proposal organization. With good logic, proper English sentences, and correctly spelled words, the reviewers can quickly understand your discussion and avoid any misunderstandings.

Proposals should be clean, bound copies reproduced clearly from an original. A cover printed on thick cover stock is preferred, as is spiral, perfect, or similar binding. The cover page will not be counted as part of the 25-page maximum. Top, bottom, and side margins should be one inch excluding headers, footers, and page numbers.

The Representations and Certifications form will not be counted as part of the 25-page maximum. This form should not be in the bound proposal. One completed and signed original should be stapled and sent with your bound proposals.

Main headings should be in all uppercase letters and boldfaced. Subheadings should be in initial caps (first letter of each word capitalized) and boldfaced. Third-level headings should be avoided.

All units of measure should be given in English and SI (metric) values. All artwork should be clean and legible.

ATTACHMENT D

School Participation Agreement

The U.S. Department of Energy (DOE), NREL, AIA, and BP Solar are sponsoring a competition entitled Solar Decathlon, a university competition to design, build, and operate solar-powered houses. The Solar Decathlon will be held in 2005 in Washington, D.C. ("Event"). The "Event" includes the SCHOOL designing, building, and testing a solar building and participating in preliminary activities such as building performance modeling, design, construction, instrumentation, data collection and the acquisition and operation of an electric car prior to the "Event." Up to eighteen (18) collegiate teams will participate in the approximate three-week long Solar Decathlon in Washington D.C. To compete for entry into the Solar Decathlon, the SCHOOL agrees to prepare a proposal on how the SCHOOL will design, build, test and compete with a solar-powered house and an electric car in the Solar Decathlon. The electric vehicle course will include state and federal highways. Strict adherence to all traffic regulations will be required. Neither DOE nor NREL, AIA, or BP Solar shall be liable to the SCHOOL for any delay in the Solar Decathlon or if the Solar Decathlon is not held.

Rules

The SCHOOL agrees to abide by the rules established for the "Event," a copy of which is available at <http://www.solardecathlon.org>, entitled, Solar Decathlon Rules and Regulations, September 18, 2002. The SCHOOL further agrees to abide by any revised regulations.

Release of Liability

The SCHOOL hereby releases the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors, and representatives from any and all claims, losses, expenses, and demands, including those resulting from injury or death to any person or damage to any property, arising from the SCHOOL's work on or participation in the "Event" or any activities incidental thereto.

In addition, before the commencement of the Solar Decathlon, the SCHOOL shall secure from each of the SCHOOL's participants, a signed written release that releases the United States Government, NREL, any other "Event" sponsor, and the SCHOOL, their respective officers, directors, employees, agents, contractors, subcontractors, and representatives, from any and all claims, losses, expenses, and demands, including those resulting from injury or death to any person or damage to any property, arising from the participant's work on or participation in the "Event" or any activities incidental thereto. The SCHOOL will retain such signed releases for a period of three (3) years and will make them available to NREL or DOE upon request.

Vehicular and General Liability Insurance

The SCHOOL, at the SCHOOL's expense, shall maintain for the duration of the "Event", vehicular liability insurance with limits of liability for bodily injury of not less than US \$200,000.00 for each person and US \$500,000.00 for each occurrence; and limits of liability for property damage of not less than US \$40,000.00 for each accident and US \$500,000.00 for each occurrence.

The SCHOOL, at the SCHOOL's expense, shall maintain for the duration of the "Event", general liability insurance with limits of liability for bodily injury of not less than US \$500,000.00 for each person and US \$500,000.00 for each occurrence; and limits of liability for property damage of not less than US \$100,000.00.

The SCHOOL, at the SCHOOL's expense, shall maintain for the duration of the "Event", workers' compensation insurance with limits of liability as required by applicable law; and employer's liability insurance for liability for bodily injury of not less than US \$100,000.00 for each person and US \$100,000.00 for each occurrence.

The SCHOOL agrees to furnish NREL or DOE, upon request, evidence satisfactory to NREL or DOE of such vehicular liability, general liability, workers' compensation liability, or employer's liability insurance coverage.

Indemnification

To the extent permitted under applicable state law, the SCHOOL hereby indemnifies and holds harmless the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, from any and all damages, claims, losses, expenses, and demands, including court and counsel fees, for any injury or death of any person or damage to any property, arising out of or in any way connected with the SCHOOL's officers, agents, or employees' work on or participation in the "Event" or any activities incidental thereto.

It shall be the SCHOOL's duty, at the SCHOOL's expense, to comply with all Federal, State and Local laws, ordinances, and regulations, if any, applicable to the work to be done hereunder, and before starting work. To the extent permitted under applicable state law, the SCHOOL shall hold harmless the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, from all damages of any nature whatsoever that the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, may suffer as a result of the SCHOOL's failure to so comply.

The SCHOOL shall assume full responsibility for all officers, agents, or employees of the SCHOOL working on or participating in the "Event" and, subject to applicable state law, shall indemnify and hold harmless the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, from all liability and expenses, including court and counsel fees, on account of negligence or willful acts or omissions of the SCHOOL's officers, agents, or employees arising out of:

- (a) Accidents or injuries to the SCHOOL's officers, agents or employees; or damage to the property of any of them; and
- (b) Accidents or injuries to others or damage to the property of others (including the United States Government, NREL, and any other "Event" sponsor, their respective

officers, directors, employees, agents, contractors, subcontractors and representatives).

If requested, the SCHOOL shall assume, at the SCHOOL's own expense, the defense of suits that may be instituted against the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, on account of the SCHOOL's failure to conform to laws as herein required.

The SCHOOL further agrees that if the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, should legally incur costs whatsoever under the applicable workers' compensation laws by reason of the SCHOOL's officers, agents, or employees' injury or death while working on or participating in the "Event", the SCHOOL will indemnify and hold harmless the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, for such costs which the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, may legally be required to pay the employees or agents of the SCHOOL.

Relationship of the Parties

The SCHOOL, the United States Government, NREL, and any other "Event" sponsor, their respective officers, directors, employees, agents, contractors, subcontractors and representatives, are independent contracting parties, and nothing contained in this Participation Agreement shall be deemed to create a partnership, joint venture, or agency relationship between them, nor does it grant any party any authority to assume or create any obligation on behalf of or in the name of the other.

Entire Agreement

This Agreement constitutes the entire agreement between the SCHOOL, the United States Government, NREL, and any other "Event" sponsor relating to the subject matter covered herein and cancels and supersedes all previous agreements between the parties relating to the subject matter contained herein. Any modification to this Agreement must be in writing and signed by the SCHOOL, NREL, and DOE.

FOR THE SCHOOL TO BE CONSIDERED FOR ENTRY IN SOLAR DECATHLON, THE SCHOOL SHALL SIGN A COPY OF THIS AGREEMENT AND RETURN ONE (1) SIGNED COPY OF THIS AGREEMENT WITH THE SCHOOL'S PROPOSAL BY APRIL 30, 2003.

The provisions, terms, and conditions for entering and participating in the Solar Decathlon ("Event") is acknowledged and accepted on this date.

Printed name of SCHOOL

Signature of SCHOOL Officer

Date

Printed Name of SCHOOL Officer

Title of SCHOOL Officer

Return one (1) signed copy with the SCHOOL's Solar Decathlon Proposal

ATTACHMENT E
SAMPLE SUBCONTRACT

SUBCONTRACT NO. *

UNDER

PRIME CONTRACT NO. DE-AC36-99GO10337

CONTRACTING PARTY: MIDWEST RESEARCH INSTITUTE
NATIONAL RENEWABLE ENERGY LABORATORY
DIVISION

SUBCONTRACTOR: *

ADDRESS: *

SUBCONTRACT TITLE: ""*?"

TYPE OF SUBCONTRACT: FIRM FIXED PRICE

PERIOD OF PERFORMANCE: DATE OF EXECUTION THROUGH *

SUBCONTRACT AMOUNT: \$5,000.00

PAYMENT TERMS: NET 30

**SUBCONTRACTOR'S
REMITTANCE NAME
AND ADDRESS:** *

**FUNDED AMOUNT AND
TASK CHARGE NUMBER:** \$ 5,000.00

SUBCONTRACT NO.*
BETWEEN
MIDWEST RESEARCH INSTITUTE
NATIONAL RENEWABLE ENERGY LABORATORY DIVISION
AND

SCHEDULE

INTRODUCTION

THIS SUBCONTRACT is effective upon execution by the Midwest Research Institute, National Renewable Energy Laboratory Division and is between the Midwest Research Institute, acting through its National Renewable Energy Laboratory Division (hereinafter called "NREL") and * (hereinafter called "Subcontractor"), whose principal offices are located in *.

Midwest Research Institute has entered into Contract No. DE-AC36-99GO10337 (hereinafter called "Prime Contract") with the Department of Energy (hereinafter called "DOE"), an agency of the U.S. Government (hereinafter called "Government"), for the operation and management of the National Renewable Energy Laboratory.

This subcontract is entered into in furtherance of the performance of the work provided for in the Prime Contract.

AGREEMENT

NOW, THEREFORE, the parties hereto agree to the following terms and conditions:

ARTICLE 1 - THE WORK TO BE PERFORMED

- A. The Subcontractor shall perform the work generally described as "*", and specifically provided for in Appendix A, Statement of Work, attached hereto and made a part hereof, pursuant to the provisions of this subcontract.
- B. Specific deliverables, quantities, due dates, reporting requirements, and addresses are set forth in Appendix A hereto.



ARTICLE 2 - THE PERIOD OF PERFORMANCE

The period of performance under this subcontract shall commence upon the execution date of this subcontract and shall be completed within * of such date; provided, however, that this period may be extended for additional periods by mutual written agreement of the parties.

TICLE 3 - PRICE AND PAYMENTARTICLE

A. In full consideration of the Subcontractor's performance, hereunder, NREL shall pay the Subcontractor the prices stipulated in B below, less any deductions provided in this subcontract. The total price for performance and receipt and acceptance of all deliverables under this subcontract is \$5,000.00.

B. Payments will be made by NREL upon receipt and acceptance of the following deliverables:



<u>Occurrences</u>	<u>Amount</u>
1. *	\$5,000.00
Total Price:	\$5,000.00

Said payments shall be made after receipt of and acceptance by NREL of the specified deliverables above and upon submission by the Subcontractor of an invoice, in a form satisfactory to the Subcontract Administrator in accordance with the article entitled "Invoices"; provided, however, that said payments shall not be deemed to prejudice any rights which NREL may have by law or under other provisions of this subcontract.

TICLE 4 - APPLICABLE DOCUMENTATION

In addition to the terms and conditions contained in this Schedule, the following documents are attached hereto and made a part of this subcontract:

- A. Appendix A, entitled "Statement of Work" dated *.
- B. Appendix B-2, entitled "Standard Terms and Conditions" dated 07/24/00.
- C. Appendix C-2 entitled "Intellectual Property Provisions" dated 10/22/98.
- D. Subcontractor's technical proposal dated *, together with any revisions, is hereby incorporated by reference. In the event there is a conflict between the Subcontractor's technical proposal and any other provisions of this subcontract, the latter shall prevail.

TICLE 5 - ORDER OF PRECEDENCE

Any inconsistency in this subcontract, shall be resolved by giving precedence in the following order:

- A. This Schedule;
- B. Statement of Work (Appendix A);
- C. Standard Terms and Conditions (Appendix B-2);
- D. Intellectual Property Provisions (Appendix C-2);
- E. Other provisions of this subcontract whether incorporated by reference or otherwise; and

- F. The Subcontractor's technical proposal, if incorporated in this subcontract by reference or otherwise.

ARTICLE 6 - RIGHTS TO PROPOSAL DATA

Except for technical data contained on pages * of the subcontractor's proposal dated * which are asserted by the Subcontractor as being proprietary data, it is agreed that, as a condition of the award of this subcontract, and notwithstanding the provisions of any notice appearing on the proposal, the Government and NREL shall have the right to use, duplicate, disclose and have others do so for any purpose whatsoever, the technical data contained in the proposal upon which this subcontract is based.

ARTICLE 7 - SUBCONTRACT ADMINISTRATION RESPONSIBILITIES

- A. Signature Authority: This subcontract may only be modified by a formal modification signed by an authorized official of NREL.
- B. Subcontract Administration Responsibilities: The authorized official of NREL has designated , as the Subcontract Administrator for this subcontract with the responsibilities for subcontract administration and negotiation of any modifications to this subcontract. The Subcontract Administrator's telephone number is (303) 384-.
- C. Technical Monitoring Responsibilities: The authorized official of NREL has designated , as the Technical Monitor for this subcontract with the responsibilities of monitoring the technical work or services to be performed under this subcontract. The Technical Monitor does not have the authority to make any commitments or authorize any changes which may affect the subcontract's price, scope of work, terms, or conditions. Any such changes shall be referred to the Subcontract Administrator designated in Paragraph B above. The Technical Monitor's telephone number is (303) 384-.

ARTICLE 8 - KEY PERSONNEL

- A. It having been determined that the individuals, whose names appear below, are necessary for the successful performance of this subcontract, the Subcontractor agrees to assign or have assigned such individuals to the performance of the work under this subcontract and shall not reassign or remove any of them without the consent of the Subcontract Administrator by modification to this subcontract:

<u>Name</u>	<u>Project Title</u>	<u>Telephone</u>
*	*	*

- B. Whenever, for any reason, one or more of the designated key personnel designated above, is unavailable for assignment for work under this subcontract, the Subcontractor shall, with the approval of the Subcontract Administrator, replace such individual with an individual of substantially equal abilities and qualifications.

ARTICLE 9 - INVOICES

Invoices for work accomplished under this subcontract shall be submitted in an original and one copy to:

National Renewable Energy Laboratory
Attn: *, MS 2713
1617 Cole Boulevard
Golden, CO USA 80401-3393

To facilitate processing and payment each invoice shall include as applicable the following: (1) the date of the invoice, (2) the subcontract number which appears on the cover sheet of this subcontract, (3) the occurrence number associated with the requested payment as contained in Article 3 or a description of the supplies, or services covered by the invoice; and (4) any other information or documentation required by other provisions of this subcontract.

Payments under this subcontract shall be made in accordance with the payment terms and to the Subcontractor's remittance name and address shown on the cover sheet of this subcontract. Final payment under this subcontract shall be made upon receipt of any required patent clearance from DOE and receipt of a final executed Release of Claims.

The payment terms of this subcontract shall mean net days from the date of receipt of an acceptable invoice or the date of receipt and acceptance of all deliverables, reporting requirements or closeout documentation covered by the invoice, whichever is later.

The Subcontractor shall submit its invoices in reasonable detail in accordance with the payment schedule contained in the Article 3 showing the total fixed price invoiced both currently and cumulatively. An authorized representative of the Subcontractor shall sign the following certification on each invoice submitted for payment:

"I certify that this invoice is correct and proper for payment, and payment for this amount has not and will not be received under any other Government contract or subcontract or other source of Government funds.

Authorized Official

Date"

The Subcontractor is hereby notified that NREL may withhold payment on invoices submitted, if the Subcontractor has failed to comply with or is delinquent in the submission of the reporting or deliverable requirements under this subcontract associated with the fixed price payment, until such time as the Subcontractor has complied or submitted such reporting or deliverable requirement.

ARTICLE 10 - PUBLIC DISCLOSURE

Publicity release of any nature in connection with this subcontract shall not be made by the Subcontractor without prior review and approval of the NREL Subcontract Administrator.



ARTICLE 11 - INTEGRATION

This subcontract contains the entire understanding between the parties, and there are no understandings or representations except those set forth or incorporated by reference herein. No subsequent modifications of this subcontract shall be of any force or effect unless in writing signed by a duly authorized official of NREL.

IN WITNESS WHEREOF, the parties hereto have executed this subcontract as of the date fully signed below.

ACCEPTED: *

**AUTHORIZED: MIDWEST RESEARCH INSTITUTE
NATIONAL RENEWABLE ENERGY LABORATORY DIVISION**

BY: _____

BY: _____

TITLE: _____

TITLE: _____

DATE: _____

DATE: _____